Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-3. (Canceled)

4. (Currently Amended) A method for optimizing the recovery of a hydrocarbon fluid in place in a stratified hydrocarbon reservoir, comprising constructing a reservoir model of the stratified hydrocarbon reservoir, characterized in that it comprises the following stages:

a) selecting at least one layer of the stratified hydrocarbon reservoir where an interface between the fluid in place and a flushing fluid moves in a stationary manner, the interface separating an upstream zone and a downstream zone by:

- constructing an *a priori* interface form, assuming that the hydrocarbon fluid displacements at any point thereof are stationary,

- ~~determining the pressures field on either side of the *a priori* interface~~ evaluating a pressure $p_1(z)$ at the interface for the upstream zone,

- evaluating a pressure $p_2(z)$, at the interface for the downstream zone,

- calculating a pressure jump at any point of the interface from the pressures $p_1(z)$ and $p_2(z)$,

- iteratively changing the form of the interface to minimize the pressure jump, until the ~~pressures on either side of~~ jump is below a defined critical value in at least one part of the interface ~~become equal at any point of this part~~, the part defining the at least one layer

b) modifying the said reservoir model by assigning mean hydrodynamic properties uniformly to ~~each zone of the hydrocarbon reservoir delimited by each interface part, when said equalization is reached~~ the at least one layer;

c) determining a viscosity of the flushing fluid which allows to optimize the recovery, by selecting the viscosity which optimize the stationary displacements in said hydrocarbon reservoir, by using the said model; and

d) injecting a flushing fluid having said viscosity into the stratified hydrocarbon reservoir to drive the hydrocarbon fluid to be recovered.

5. (Previously Presented) A method as claimed in claim 4, wherein, for lack of obtaining a pressure equalization on either side of the interface along the latter, the interface is segmented into several parts and the form of these different parts is modified iteratively and separately, until a pressure equalization is obtained on either side thereof, the extent of each interface part, when said equalization is reached, delimiting a favourable layer to which mean hydrodynamic properties are uniformly assigned.

6. (New) A method as claimed in claim 4, wherein the flushing fluid moves horizontally and the *a priori* interface is a plane *a priori* interface.